

EXHIBIT 1

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
(Alexandria Division)

NETSCAPE COMMUNICATIONS CORP.,	:	
	:	
Plaintiff,	:	Civil Action No. 1:09 CV 225
	:	TSE/ODD
v.	:	
	:	
VALUECLICK, INC., MEDIAPLEX, INC.,	:	
FASTCLICK, INC., COMMISSION JUNCTION,	:	
INC., MEZIMEDIA, INC. AND WEB CLIENTS,	:	
L.L.C.,	:	
	:	
Defendants.	:	
	X:	

DECLARATION IN SUPPORT OF DEFENDANTS
VALUECLICK, INC., AND FASTCLICK, INC.'S MEMORANDUM ON CLAIM
CONSTRUCTION CONCERNING UNITED STATES PATENT NO. 5,774,670

I, David M. Sterling, declare THAT:

1. I reside at 3222 Deauville Place, Statesville, NC 28625.
2. I have been retained as a technical expert by Valueclick, Inc. and Fastclick, Inc. in the above identified action to render opinions with respect to certain claim construction issues regarding US Patent No. 5,774,670 (the "670 Patent"). I am being compensated at my usual consulting rate for my work on this matter. That rate is \$400 per hour. My compensation is not dependent on the outcome of this case.

3. I have 33 years of experience as a software analyst and architect with the past 25 in the position of CEO and Principal Consultant of Sterling International Consulting Group, my own consulting firm established in 1984. As a specialty, my business focus since 1995 has been in development of web-enabled and web-based systems specifically in Ecommerce, Collaboration and Document Management Systems. I am also an author of several publications, most recently "Microsoft Office SharePoint Server 2007 The Complete Reference" published by Osborne-McGraw Hill. A copy of my resume is attached hereto as Exhibit A.

4. In addition to my background experience and general knowledge, I have developed my opinion based on the following documents:

- a. The '670 Patent
- b. The file history for the '670 Patent
- c. RFC 2109

I. Historical Context

5. The primary purpose of the internet when invented was to provide a means for users to access local document repositories in the course of study, reference and research. Specifically built and used by researchers and academics, it was designed as a way for researchers to collect and store documents in a single place (the Web server) and permit users (co-workers and other researchers) to view the documents instead of printing or physically mailing them. HyperText Transfer Protocol ("HTTP") was developed to enable remote access to these repositories for users outside of the organization, allowing the provider to list only the documents they wanted others to see.

6. The development of “browsers” was to provide a way for an organization or university to allow outside users to see listings of documents available at a given site (domain) and allow them to view and/or download the documents to their own PC - much the way a person would use a Card Catalog at the library to find a specific book and check it out. To make documents easier to find, listings were generally organized by subject, discipline or author. Web sites at the time were mainly simple text and “directory listings” of documents.

7. The ‘world wide web’ itself was not a fully interconnected web. Connection to most of Web sites required a direct connection to the Web server network via a modem and these connections were often broken.

8. Browsers were introduced primarily as a way to make “browsing for documents” more ‘friendly’ allowing listings to be better presented so the user could find what they were looking for more easily. In addition, the user ‘experience’ was enhanced to allow the display of pictures and other graphics to take advantage of new computers that were changing from ‘text based’ interaction to ‘graphics’ based interaction. The actual term “Browser” was coined based on how users used it at the time – a user could bring up a ‘directory listing’ of documents available at a particular server (domain) and ‘browse the list’ to find the document they were looking for.

9. The original Browsers were text based only; it was with the advent of HyperText Markup Language (HTML) in 1992 that Browsers were built to display graphics in addition to text. Full use of HTML within Browsers was not heavily developed until 1994 and outside of the technical community, not in widespread use until Mosaic-type browsers that supported graphics became available.

10. Browser applications like Mosaic (used during that time) as well as modern browsers today are client applications installed on the end user's computer that provide the ability to establish a connection to a given Web Server using HTTP. In addition, the Browser is able to interpret an HTML document and display it on the users screen as a 'web page'. The client Browser handles establishing a connection to a Web server and submitting a request for an HTML document. The Server then responds with the HTML formatted document (required for the Browser to display it properly on screen).

11. As they are today, Browsers in the early 90's requested HTML documents and handled interpreting the received static (text) HTML document line by line and interpreted the HTML tags. If an HTML tag referenced an asset (such as an image) the Browser would submit a request to the server where the asset was located.

12. In addition to static HTML files, early Browsers also made use of scripting languages like CGI (Common Gateway Interface). Executed on the Server by a request from the Browser, these scripts (like an HTML document) would be interpreted line by line returning only a final HTML document to the Browser. Browsers that utilized "client" side scripting were not available until 1996 with the release of JavaScript. While run on the Client instead of the Server, the Browser interprets script (JavaScript, VBScript) just like HTML, processing one line at a time.

II. The '670 Patent

13. The '670 Patent (attached hereto as Exhibit B) outlines the use of HTML documents as they were (and are) handled by all Browsers as shown in Figure 2 of the '670 Patent below.

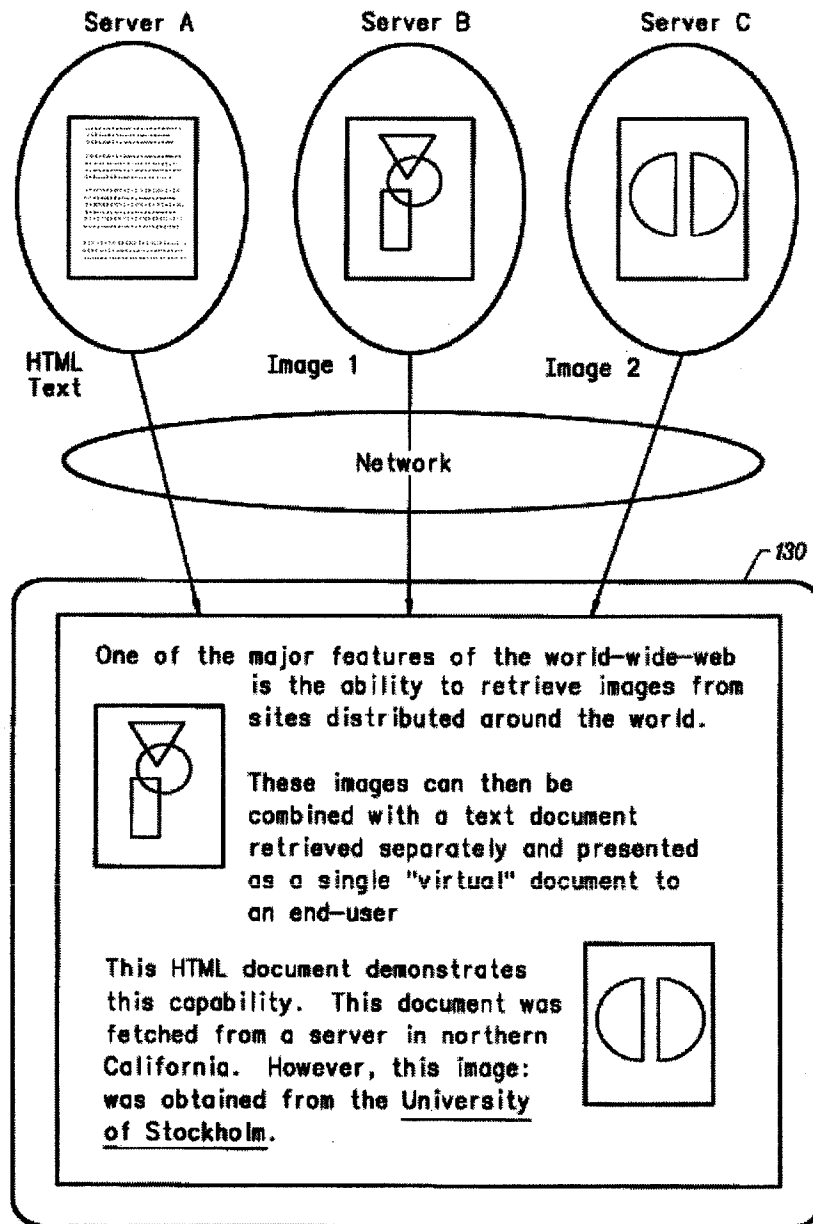
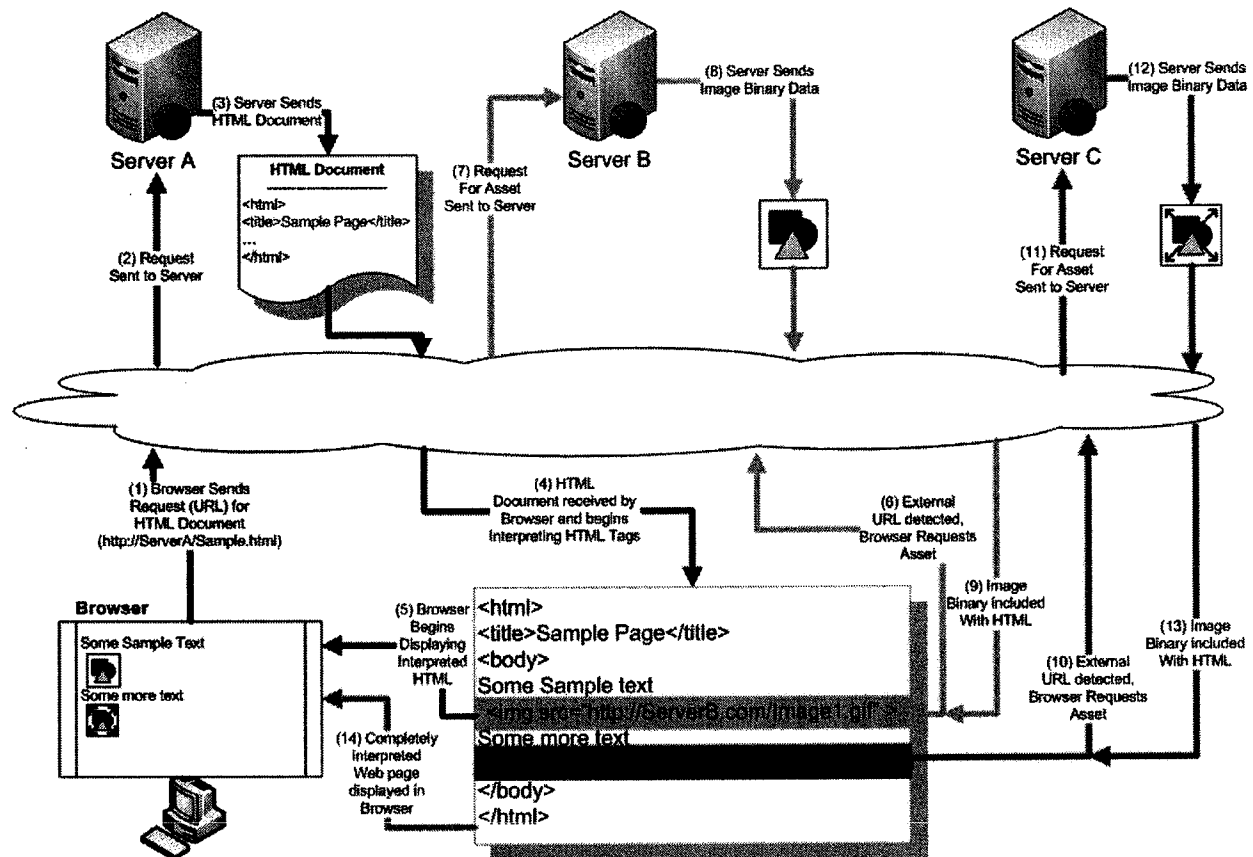


FIG. 2

14. A connection is made from the Client to the Server and a request issued for a specific HTML document; in interpreting the HTML tags within the HTML document, text and images can be retrieved from one or more Servers. In the Patent, the process outlined is specifically identifying the flow of the request from Client to Server and Server back to Client. A more accurate representation of the process illustrated in Figure 2 is as follows:

Web Page Request and Rendering Process



15. The Web Page Request and Rendering process handles the ‘interpretation’ of HTML to “render” (display) a page to the end user. The steps in the simple example as shown in the above diagram are as follows:

- Step 1, From the Browser application, the user enters a URL (Uniform Resource Locator) to a specific Domain address (which has a set default HTML document or ‘Home Page’) or a specific HTML document name
- Step 2, The request is sent via the Web to Server A using the web Domain Name Service or DNS (DNS translates a friendly name like `www.web.com` into the actual Internet Protocol (IP) address for a specific Web server)

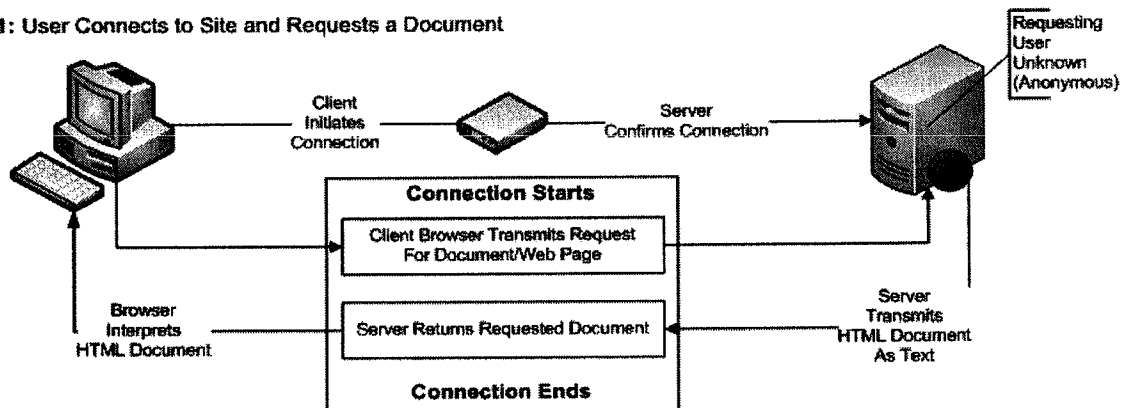
- Step 3, After receiving the request, Server A responds by transmitting the requested HTML document back to the client Browser
- Step 4, When the client Browser receives the HTML document, it begins to translate the HTML code line by line
- Step 5, As HTML tags are interpreted, the Browser begins displaying the web page "view" for the end user
- Step 6, As the Browser processes the HTML tags, it detects that an Image (HTML 'img' Tag) has been defined in the web page and sends a Get request to the external URL specified (Server B)
- Step 7, The Browser request to retrieve the asset is sent to Server B via the Web
- Step 8, Server B loads the image binary data and begins transmission back to the Browser
- Step 9, The Image data returned is combined with the HTML to build a portion of the page to display
- Steps 10 through 13 (Server C) repeat steps 6 through 9 for an additional image located at a different URL/Web server
- Step 14, The entire web page is rendered (displayed) including Text and Images in the Browser display

NOTE: If any resource requested (like an image) defined in an HTML image tag is not found, the Browser typically displays a "missing image" (a red X) in the page where the image would have been displayed.

16. Since the communications between a Browser and Web server were and are done by simple requests and responses, the connection is considered 'stateless'. Through the Browser, the user makes a request to a Server for an HTML document. When the request is received by the Web server, it replies with the requested HTML document and the connection is closed. When the user makes another request, it is starting completely over – the Server is not aware that the request is coming from the same user. In addition, connections from the Browser to the Web server are 'anonymous' – the Browser initiates the connection, submits a request and the Web server responds with an HTML document, but the Web server has no idea of who the user is (or was). This 'stateless' communication is illustrated by the figure below.

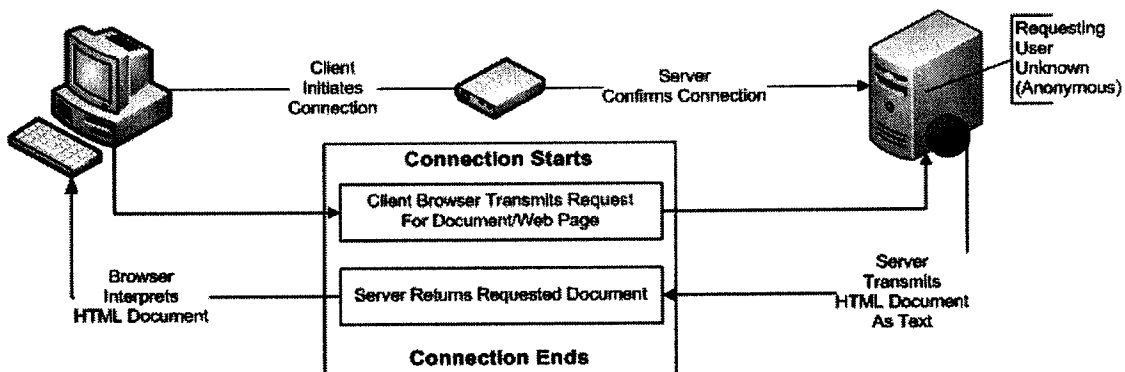
Stateless Processing with Disconnection

Step 1: User Connects to Site and Requests a Document



Step 2: User closes browser (or disconnects)

Step 3: User Returns to Site and Requests a Document



17. Outside of the request and return of HTML documents, the '670 Patent defines maintaining a "transaction" started between a Browser and a Web server in a stateless connection. See col. 10, Ins. 19-21. The '670 Patent drew on the scenario above and addressed it by the use of state information to provide a way for the Server to know that a request was from a returning user to resume a transaction.

18. The '670 Patent outlines using the connection between the Browser and the Server to send an HTML document and, via the HTTP Request and Response Headers, to send the state information for storage on the user's client machine (see col. 7, Ins 60-63) as shown in Figure 4 of the '670 Patent below.

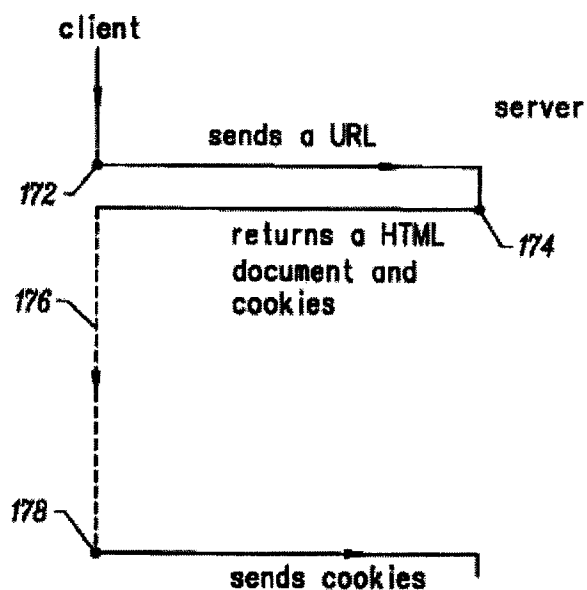
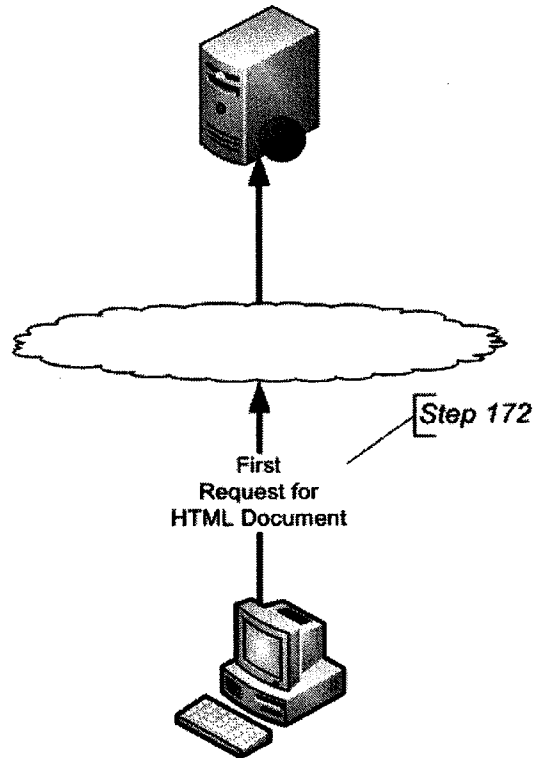


FIG. 4

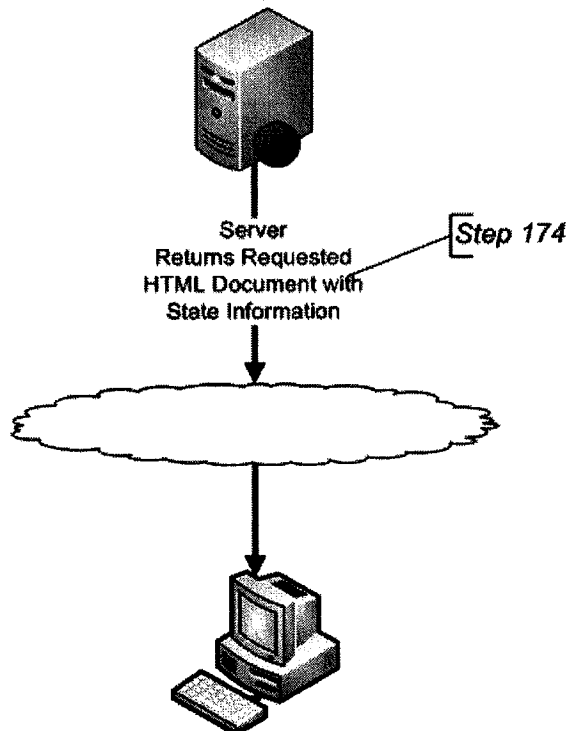
19. Based on my analysis of the steps illustrated in Figure 4 (above), my interpretation of the process is as shown in the three figures that follow. The figure below illustrates my interpretation of step 172 of Figure 4:

HTTP Transmission with State Information – Step 172



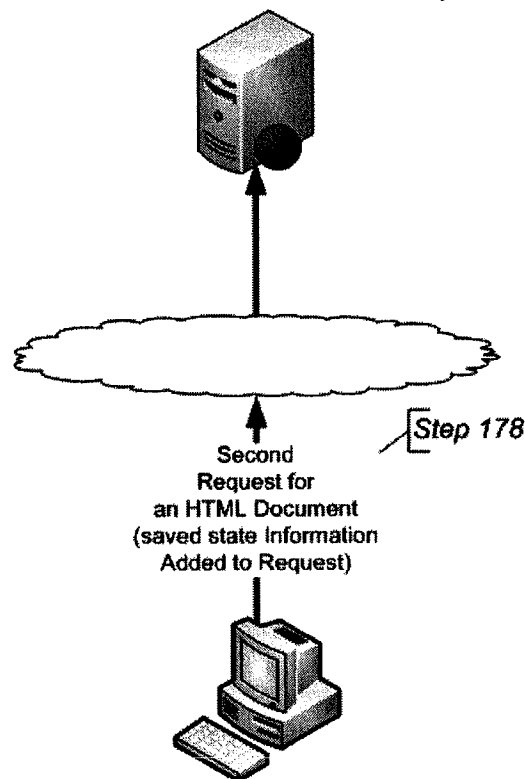
The figure below illustrates my interpretation of step 174 of Figure 4:

HTTP Transmission with State Information – Step 174



The figure below illustrates my interpretation of step 178 of Figure 4:

HTTP Transmission with State Information – Step 178



20. In the Ecommerce¹ scenario outlined in the '670 Patent (columns 11-13), this method of using state information would be used to store product information. As a user selected products during an Ecommerce transaction, additional state information would be stored to hold the product information. See col. 12, lns. 45-53. This process is illustrated in Figure 5 of the '670 Patent below.

¹ In the mid 1990s, along with using Web sites to create a web presence, many in the industry began to utilize Web Sites for the purposes of promoting their products and services, a process that was coined "Ecommerce" (Electronic Commerce). The concept of an "electronic shopping cart" was also developed, in which users could view an HTML document, select a quantity and 'add' that product to the cart.

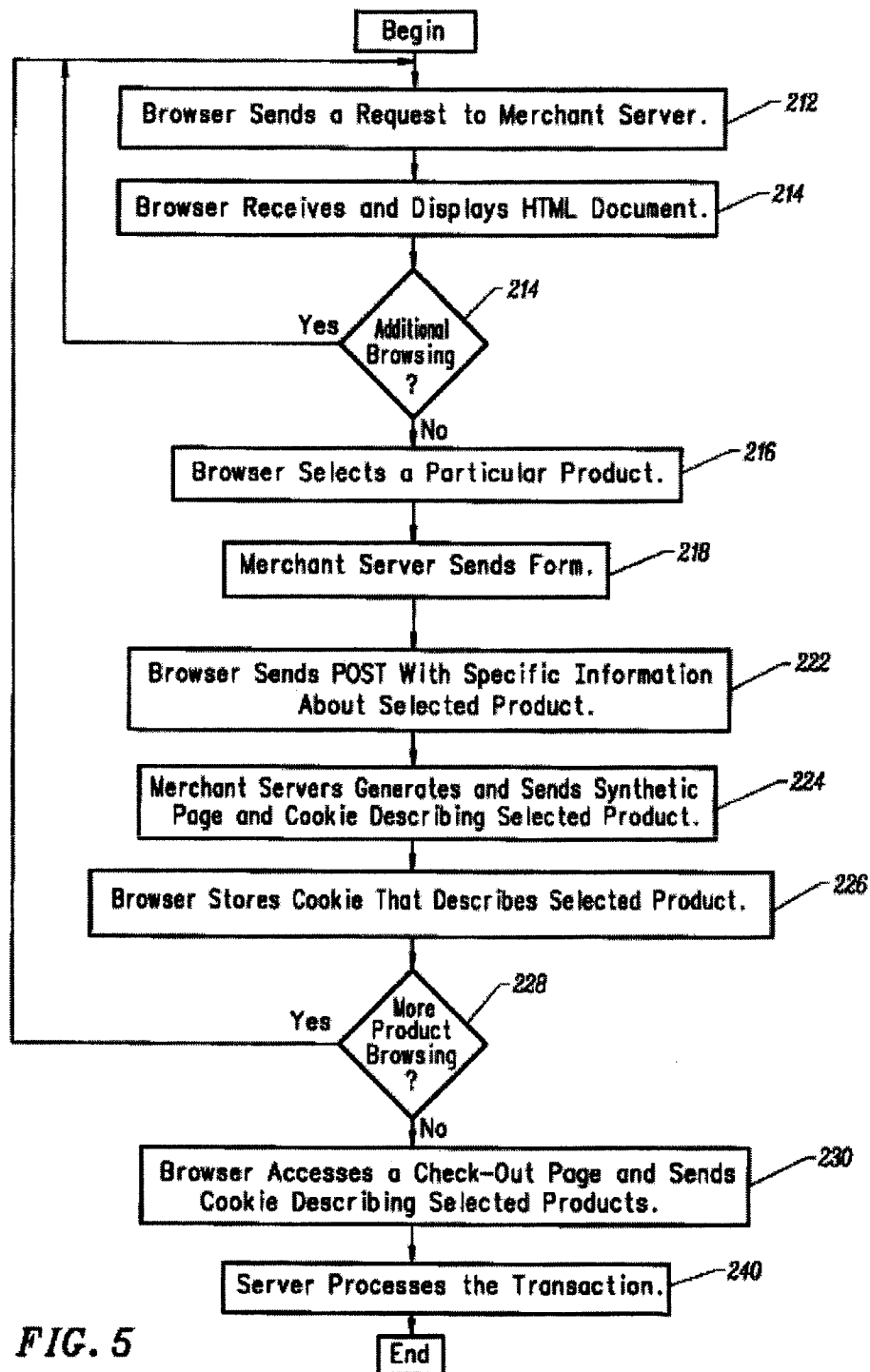
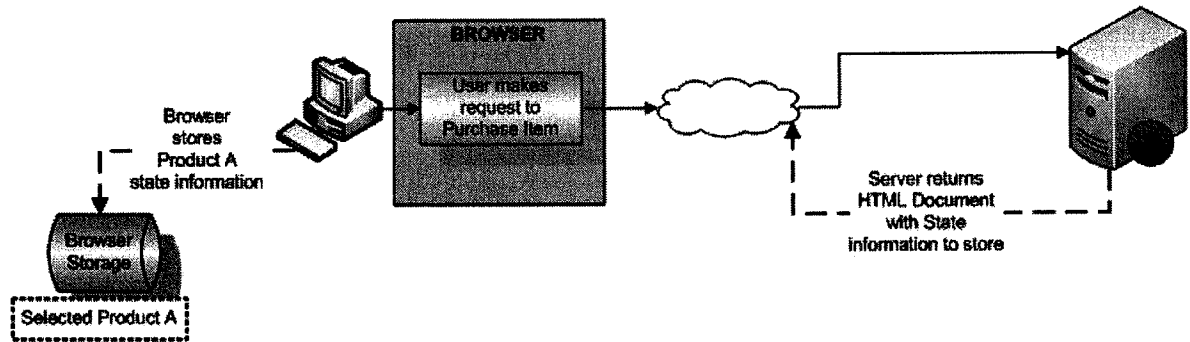


FIG. 5

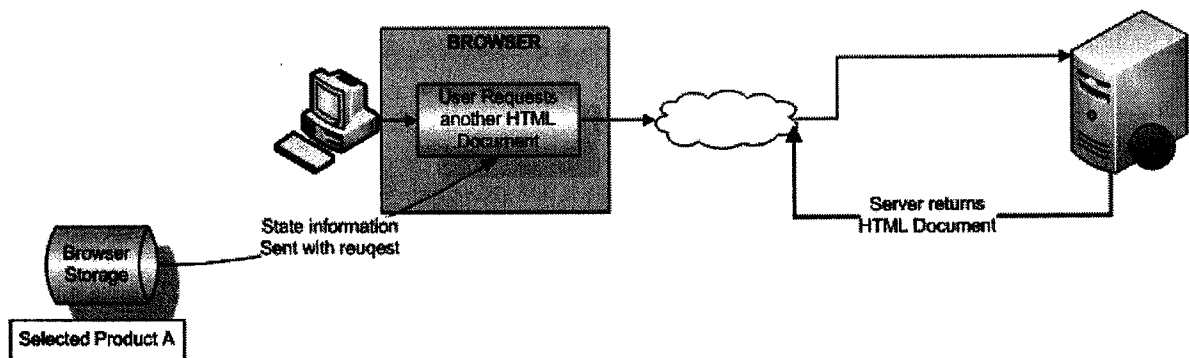
21. Based on my understanding of the Patent's description of the steps illustrated in Figure 5 (above), my interpretation of the described process is as shown in the figure below.

Processing in Purchasing Cycle

Selecting Product to Purchase



User Browsing Additional Products or Pages



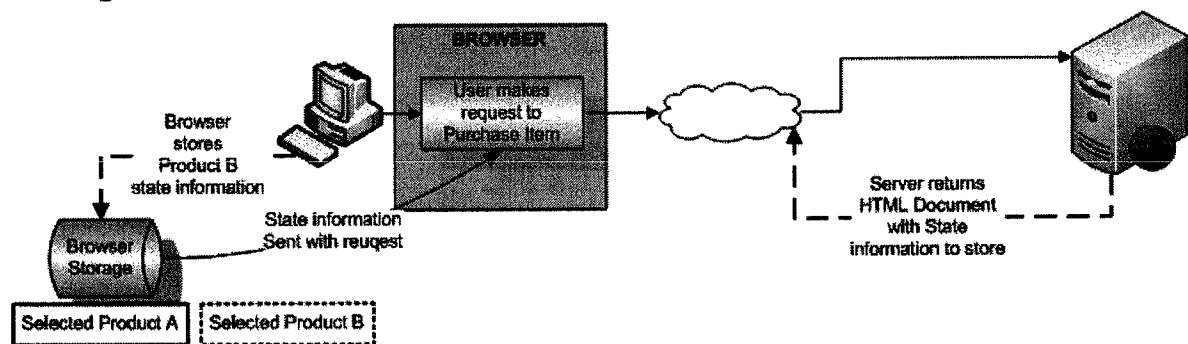
At its core, this illustrates the same process outlined in Figure 4 – the request for a document enables returning of the HTML document with state information. On future requests to the same server, the state information is included with the request for the server to work with.

22. By way of background, although some larger companies, in the mid 1990s, were able to develop their own Ecommerce sites, at the time it was quite expensive. In addition to hardware and software costs, communication lines and modems were also required. In response, many organizations including MCI and AOL developed the concept of 'Merchant Marketplaces' in which the Ecommerce site was 'hosted'. Like a 'virtual mall', individual 'shopkeepers' could use the same "web store" and sell their products with their own static web pages. The process of adding an item to a cart and eventually purchasing the items was common across all of the shopkeepers – at the time of the purchase, each shop would be notified of what had been

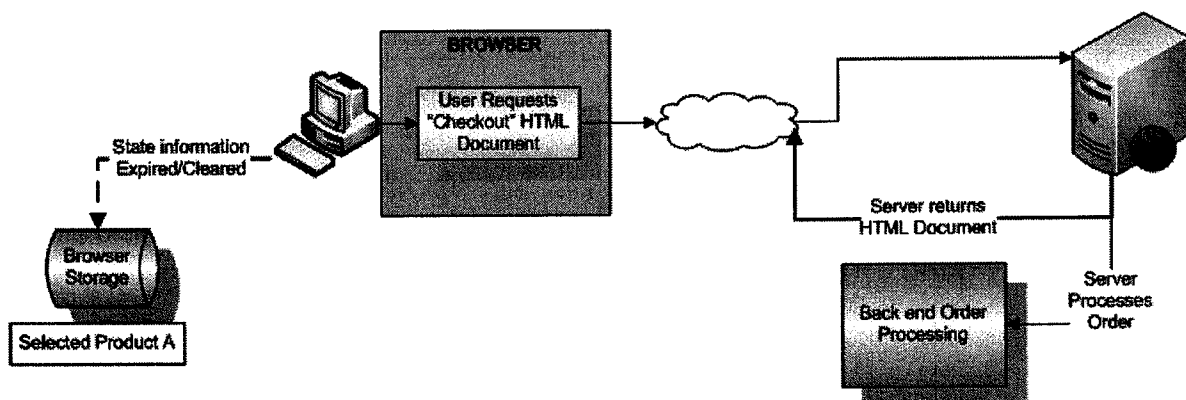
purchased from their store and handle the process of billing and shipping the item themselves. This model is still in use as demonstrated by sites like eBay; eBay manages the site and individual users use it to create their own “virtual stores”.

23. This process is described in the ‘670 Patent. See col. 13 Ins. 9-23. When the user selected to ‘check out’ (purchase) the products, the state information would be sent back to the Server to process the ‘order’ for payment and in a ‘marketplace’ site, forward the individual purchases to the respective shop keepers to process. Based on my understanding of this description, my interpretation of the described process is as shown in the figure below.

Processing in Purchasing Cycle Selecting Second Product to Purchase

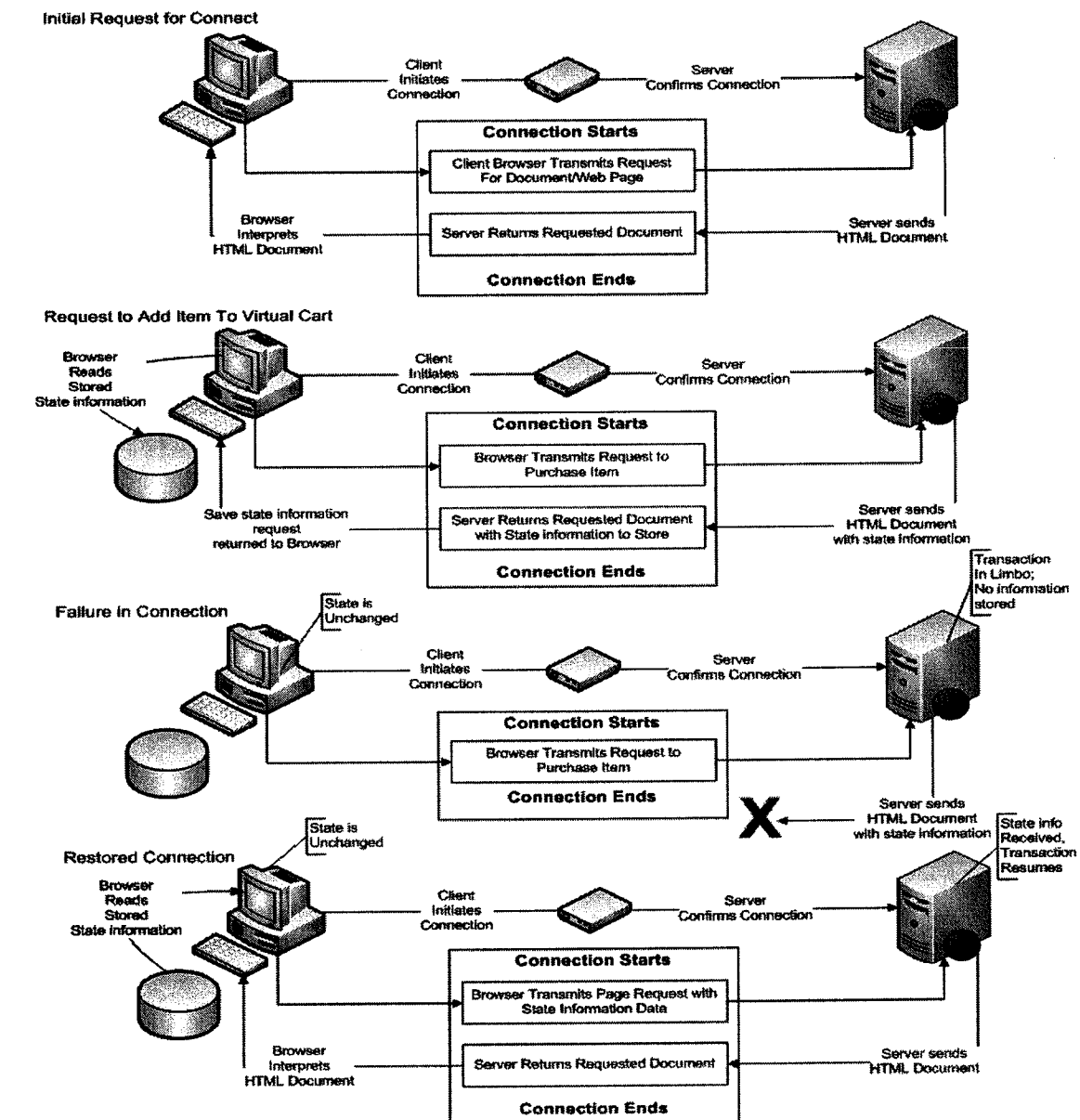


Check Out



24. As described in the '670 Patent (col. 7, lns. 35-43; col. 13, lns. 1-12), in the event that the user leaves and then returns to the Web server, the same state information would be used to 'reload' the shopping cart so that the user could resume the transaction and complete it. Since the Server itself cannot resume the transaction, the '670 Patent relies on the Client Browser to remake the request sending the state information back to the Server so the transaction can resume as demonstrated in the figure below.

Process to Resume Transaction



25. By proposing storage of state information in this way, the '670 Patent is specifically maintaining the Web server's status of the transaction as referenced in Figure 5 and described in the Summary Of The Invention. See col. 2, lns. 60-65. The sending of the state information along with the request for an HTML document by the Client to the Server enables the Server to pick up the transaction where it last left off.

26. The example outlined in the '670 Patent describes that all communications between a Client and Server are a one to one relationship as evidenced by the requirement of a specific Domain name (based on the request by the user). See col. 8, lns. 32-51; col. 9, lns. 43-46. In my opinion, use of the Domain name was to ensure that any transaction is specific to that domain alone. This establishes a one to one relationship between the Client and the Server domain that issued the state information (the Client can only transmit the state information with a request for an HTML document to the issuing Server domain).

27. As described by the '670 Patent, the information used to store data for the Server are referred to both as 'state objects' and 'state information' (col. 7, lns. 25-26); the term 'state object' is inaccurate to the literal technical definition. From a 'state' perspective, the '670 Patent uses data stored on the client to resume 'state' on the Server (state information) – in other words, the information is intended for the server's use, not the client. However, in my opinion it does not satisfy the rules of an object in technical terms. To represent an "object" an item must have three attributes – state, storage and behavior. *See e.g.* "An Evaluation of the World Wide Web with respect to Engelbart's Requirements," World Wide Web Consortium (W3C), available at <http://www.w3.org/Architecture/NOTE-ioh-arch>. While the state objects described in the Patent save information (along with the Domain name) on the client system for later user, they cannot themselves change state, nor do they have 'behavior'. A change in state would require that a state

object be able to update itself – for example moving from Green to Red which it cannot. Lastly, state objects do not have behavior since they cannot act alone nor influence anything else in the environment.

The ‘670 Patent File History

28. After review of the File History, my analysis of the ‘670 Patent was focused on the one embodiment identified by the Inventor per the Restriction Requirements set forth by the Examiner of the Patent (Examiner’s Restriction Requirement attached as Exhibit C and Patentee’s Response to Restriction Requirement attached as Exhibit D). It is my understanding that although there were three embodiments in the original application, the Examiner required the patentee to limit the claims to one embodiment and the patentee acquiesced for the purposes of having the patent reviewed and granted.

29. The File History also contains the Examiner’s Reasons for Allowance (attached as Exhibit E). The Examiner stated, in part, “The prior art of record does not teach or suggest transmitting a state object from a server to a client station wherein the state object comprises a ‘cookie’ which functions within the HTTP browser environment in the manner disclosed and enabled in the specification at page 17, line 11 through page 18 line 22 and shown in Figures 4-5.” Exhibit E at 2. After reviewing the relevant portions of the original application, the corresponding section in the ‘670 Patent is in column 7, lines 12-54.

Requesting A File On Said HTTP Server from Said HTTP Client

30. Based on my work experience in the field and analysis and examination of the ‘670 Patent and file history, it is my opinion that the phrase “requesting a file on said http server from

said http client” means the process of a Web user requesting an HTML document through a Web Browser from a Web server.

31. The ‘670 Patent repeatedly references the “requesting” phrase. See col. 5, ln. 66- col. 6, ln. 6 (“[t]o access an initial Web document, the user enters the URL for a Web document into a Web browser program. The Web browser then sends an http request to the server that has the Web document using the URL. The Web server responds to the http request by sending the requested HTTP object to the client. In most cases, the HTTP object is an plain text (ASCII) document containing text (in ASCII) that is written in HyperText Markup Language (HTML).”); col. 7, lns. 30-32 (“the client system sends an http request to the Web server. In response to the http request, the server returns an HTML document”); col. 10, lns. 25-26 (“A client system requests a Web document from the Web server ‘telemarking.acme.com’”); col. 11, lns. 8-9 (“A client system then requests a Web document from the Web server ‘telemarking.acme.com’”).

32. The “requesting” phrase is also depicted in Figures 4 and 5 of the ‘670 Patent.

33. My opinion is also based on knowledge of the state of web technology during the mid 1990s as described above in paragraphs 8-11 and 13-19, namely, that the primary role of Web browsers was (and is) to request HTML documents from Web servers and interpret the HTML for display on the Web user’s screen.

34. Based on a review of the ‘670 patent, it is also my opinion that the patentee use the terms “Web document,” “Web page” and “HTML document” interchangeably and that these terms all refer to an HTML document in the context of the ‘670 patent. My interpretation is consistent with the state of web technology during the mid 1990s as described above in paragraphs 8-11.

35. Phrases similar to this appear in Claims 1, 9, 10 and 14. Claim 1 states “requesting a file on said http server from said http client”, Claim 9 states “requesting a file on said http server”, Claim 10 states “receiving a request for a file on said http server” and Claim 14 states “requesting a file on said server.” While worded slightly differently, in my opinion these phrases are all directed to the process of a Web user, through a Web Browser, requesting an HTML document from a Web server.

Said HTTP Server

36. Based on my work experience in the field and analysis and examination of the ‘670 Patent and file history, it is my opinion that the term “said http server,” for example in the phrase “transmitting said file from said http server to said http client,” refers to the same http server from which the Web user using a web browser made the original request for an HTML document.

37. The ‘670 Patent repeatedly references the fact that the server sending the response is the same server that received the request. See col. 1, lns. 55-57 (“A browser opens a connection to a server and initiates a request for a document. The server delivers the requested document”); col. 4, lns. 52-53 (“Web servers are coupled to the InterNet and respond to document requests from Web clients”); col. 6, lns. 2-6 (“The Web server responds to the http request by sending the requested HTTP object to the client. In most cases, the HTTP object is an plain text (ASCII) document containing text (in ASCII) that is written in HyperText Markup Language (HTML).”); col. 7, lns. 14-15 (“when a server responds to an http request by returning an HTTP object to a client”); col. 7, lns. 30-33 (“the client system sends an http request to the Web server. In response to the http request, the server returns an HTML document together with a header”); col.

12, lns. 15-18 (“[s]pecifically, the browser software sends an http request for the home Web page of a merchant Web server (step 212). The merchant Web server responds to the request with an HTML document”).

38. My opinion is also based on knowledge of the state of web technology during the mid 1990s as described above in paragraphs 10, 16-19 and 26, namely that communications between a Web client and a Web server are based upon a one-to-one relationship in which a Web client makes a request to a Web server for an HTML document and the same Web server responds to the request by sending the HTML document.

39. The term “said http server” also appears throughout the clauses of Claims 1, 9, 10 and 14. See Claim 1, clauses 2, 3; Claim 9, clauses 2, 3 ; Claim 10, clauses 2, 3; Claim 14 clauses 5, 6. It is my belief that all of these uses of the term “said http server” are directed to the same http server from which the Web user using a Browser made the original request for an HTML document.

Transmitting Said File And A State Object From Said HTTP Server To Said HTTP Client

40. Based on my work experience in the field and analysis and examination of the ‘670 Patent and file history, it is my opinion that “said file” and “a state object” are always sent together from the http server to the http client within the same response. In fact, because the Web server is passive device (col. 1, lns 56-62) state information could not be sent from the Web server to the Web client without a request from the Web client.

41. The ‘670 Patent repeatedly references the transmission of “said file” and “a state object” together from said http server to said http client. See col. 7, lns. 30-36 (“the client system sends an http request to the Web server. In response to the http request, the server returns an

HTML document together with a header, which is typically separate from the HTML documents, at a time indicated by numeral 174. The header may contain one or more cookies.”); col. 7, lns. 60-63 (“As stated above, the extension to the HTTP protocol adds a new piece of state information to the HTTP header as part of an HTTP response from a Web server.”); col. 12, lns. 43-47 (“The server then generates a synthetic page and sends it to the browser running on the client system. This synthetic page preferably contains a thank you note along with confirmation information. Cookies containing information describing the selected product are also sent at this time”).

42. The contemporaneous transmission of “said file” and “a state object” is also depicted in Figures 4 and 5 of the ‘670 Patent.

43. My opinion is also consistent with my interpretation of the specification and Figures 4 and 5 of the ‘670 Patent as described above in paragraphs 18-19, 21-22 and 24-26, namely, that state information is only sent together with the HTML document requested by the Web client.

44. Based on my discussion of the Web environment in paragraph 16, it follows that at the time the patent was filed, Web servers could only send an HTML document to a client after receiving a request from the client. As I explained above, the ‘670 patent explains that a Web server is a passive device (i.e., the Web server only responds to client requests). Also, at the time the patent was filed, clients could only make requests for documents and Web servers could only respond to these requests; any additional information sent between clients and servers would have had to have been included within these requests and responses. Consequently, it is my opinion that web servers could not send state information independently from a requested document and web clients could not send state information independently from a request for a document.

45. In reaching my opinion I have also considered that claim 3 further states “wherein said state object is transmitted along with said file” and claim 8 further states “wherein said state object is encoded within a header associated with said file.” These claims do not change my opinion because the patent specification only discloses sending state information with an HTML document. This is in line with the standard practices of the industry at that time. In light of this, it is my understanding that it would be inappropriate to broaden the scope of claim 1 to cover the sending of state information independently from an HTML document.

46. Phrases similar to this appear in Claims 1, 9, 10 and 14. See Claim 1, clauses 2, 3; Claim 9, clauses 2, 3 ; Claim 10, clauses 2, 3; Claim 14 clauses 5, 6. While worded slightly differently, in my opinion all of these phrases are directed to an HTML document and state information always being sent together from the http server to the http client within the same response.

State Information/State Object

47. Based on my work experience in the field and analysis and examination of the ‘670 Patent and file history, it is my opinion that the terms “state information” and “state object” are synonymous and are used interchangeably throughout the ‘670 Patent.

48. The ‘670 Patent specifically states that the terms are interchangeable. See col. 7, lns. 26-27 (“[t]he term state object is also used herein to refer to the state information”).

49. In addition, it is my opinion that the term “state information” means information concerning the Web server’s current status of a transaction between the Web client and the web server. In my opinion maintaining state information on the Web client is only useful for submission to the same Web server and cannot be used by the Web client itself.

50. The '670 Patent repeatedly references that state information concerns the Web server's current status of a transaction between the Web client and the web server. See col. 2, lns. 60-65 ("The customer can also select products to be placed in a virtual shopping basket. The server then sends state information related to the selected products to the browser on the client for storage. When the customer wants to purchase the products in the virtual shopping basket, the browser sends the corresponding state information to a specified check-out Web page for processing."); col. 7, lns. 24-26 ("By adding the ability to transfer state information back and forth, Web servers can then play an active role in transactions between clients and servers"); col. 12, lns. 49-53 ("The browser software running on the client system stores the cookies describing the selected products within the client computer system (step 226). The stored cookies include an identification of the contents of a virtual shopping basket that contains the products selected by the consumer."); col. 13, lns. 9-13 ("When the customer desires to buy the products, the customer accesses a link that identifies a "check-out" Web page. The check-out Web page causes the browser to send all the product description cookies (230). Thus, the check-out Web page empties out the virtual shopping basket."); Fig 5.

Storing Said State Object On Said HTTP Client

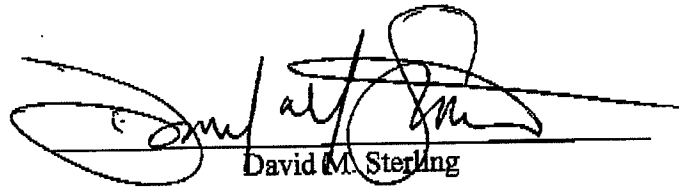
51. Based on my work experience in the field and analysis and examination of the '670 Patent and file history, it is my opinion that the term "storing said state object on said http client" specifically describes storing the state information in the memory or mass storage device of the Web client, in order to be transmitted along with future requests to the same Web server. As explained above, in my opinion, maintaining state information on the client is only useful when the state information is transmitted back to the same Web server.

52. The '670 Patent repeatedly references the storing of state information in the memory or mass storage of the Web client in order to be transmitted along with future requests to the same Web server. See col. 2, lns. 17-19 ("The stored state information can later be sent back to the server at appropriate times."); col. 7, lns. 64-66 ("The state information is stored by the receiving client system in the form of a "cookie list" for later use."); col. 8, lns. 56-57 ("If there is a match, the cookie is considered valid and is sent along with the http request."); col. 9, lns. 51-57 ("Specifically, before the client sends an http request to a Web server, the client compares the URL of the requested Web document against all of the stored cookies. If any of the cookies in the cookie list matches the requested URL then information containing the name/value pairs of the matching cookies will be sent along with the HTTP request."); see also col. 10, lns. 30-51; col. 11, lns. 14-36; col. 13, lns. 9-12.

53. My opinion is also consistent with my interpretation of the Ecommerce scenario described in the '670 Patent and outlined above at paragraphs 20-26, namely, that the purpose of saving the state information on the Web client is for the client to send the state information back to the Web server, from which the client made the original request, in order to allow the server to resume the transaction.

54. Phrases similar to this appear in Claims 1, 9, 10 and 14. Claim 1 states "storing said state object on said http client", Claim 9 states "storing said state object on said http client" Claim 14 states "storing a state object in one of said memory and said computer readable medium." While worded slightly differently, in my opinion all of these phrases are directed to storing the state information in the memory or mass storage device of the Web client, in order to be transmitted along with future requests to the same Web server.

Executed July 16, 2009



David M. Sterling